

## ABSTRACT

A method and system for protecting global alignment marks during the fabrication of wafers are described. A semiconductor wafer-in-process includes a substrate having one or more global alignment sites, each site having an alignment mark. A photoresist material is deposited over the wafer-in-process, including over the alignment marks. A stepper or other suitable device exposes full field images over the entire wafer-in-process, thus exposing a portion of the photoresist material covering the alignment marks which is developed. A globule of protective material is deposited over the patterned photoresist over the alignment marks, thus protecting them during a subsequent etching step. The globule of protective material can also be deposited over a portion of any other adjacent structures which need protection during etching.